In the Claims:

1.   (Currently Amended) A method, comprising:

determining a current processing mode of an executing software function;

when the current processing mode is a privileged processing mode, executing a direct program flow control instruction to directly access an instruction within a software having the privileged processing mode; and

when the current processing mode is an unprivileged processing mode, executing an indirect program flow control instruction to cause execution of the instruction within the software having the privileged processing mode.

2.   (Original) The method of claim 1, wherein the direct program flow control instruction is a jump instruction.

3.   (Original) The method of claim 1, wherein the indirect program flow control instruction is an interrupt instruction.

4.   (Original) The method of claim 1, wherein the software having the privileged processing mode is operating system software.

5.   (Original) The method of claim 4, wherein the software having the privileged processing mode is kernel software.

6.   (Original) A method, comprising:

identifying a program code segment implementing an access to a memory area to be executed within a privileged processing mode;

replacing the program code segment with a substitute code segment;

wherein the substitute code segment includes program code to

identify a current processing mode of the program code segment,

execute a direct program flow control instruction if the current processing mode is the privileged processing mode, and

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execute an indirect program flow control instruction if the current processing mode is an unprivileged processing mode.

7.   (Currently Amended) A computer readable medium encoded with a software application, comprising:

a software code implementing application functionality; and

a smart system call into an operating system;

wherein the smart system call comprises the software code to

identify a current processing mode of [[the]] a program code segment,

execute a direct program flow control instruction if the current processing mode is [[the]] a privileged processing mode, and

execute an indirect program flow control instruction if the current processing mode is an unprivileged processing mode.

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